The Afghanistan Agrometeorological Monthly Bulletin

Issue No: 58

December 2009

Paghman

Laghman

Chak

Agromet Network

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Summary

Winter Wheat as a dominated cereal crop has been in emergence and planting stages during the month of December 2009 in most parts of the country. Maize and Rice are at the last month of harvesting in most parts of the country.

Comparison of monthly average of NDVI for the month of December 2009 with the same month in 2008 shows large increase of NDVI in the Northern and Northwestern plain areas during the month of December 2009 compared to the same month of last year.

Few low pressure systems moved into the country, but were not accompanied by adequate moisture to bring sufficient precipitation in different parts of the country, which resulted that the country did not experienced enough rainfall.

Temperature remained at the into freezing in most parts of the country, particularly in the high elevations. Minimum temperature dropped – 19.5 C° in Central Highlands.

Crop Stage, Crop Condition and Adverse Factor

Zone	Province	District	Station	Winter Wheat Stage	Condition	Adverse Factor
Central	Kabul	Shakardara	Karizmir	Emergence	Not visible	Not seen
		Paghman	Paghman	Emergence	Not visible	Not seen
		Kabul	Darulaman	Emergence	Not visible	Not seen
		Surubi	Surubi	Planting	Not visible	Not seen
	Panjsher	Dara	Dara	Emergence	Not visible	Not seen
		Dashtak	Dashtak	Emergence	Not visible	Not seen
	Parwan	Syagerd	Syagerd	Emergence	Not visible	Not seen
		Charikar	Charikar	Emergence	Not visible	Not seen
	Kapisa	Mahmoodraqi	Mahmoodraqi	Emergence	Not visible	Not seen
		Kohistan	Kohistan	Emergence	Not visible	Not seen
	Wardak	Chak	Chak	Emergence	Not visible	Not seen
		Jaghatoo	Jaghatoo	Emergence	Not visible	Not seen
East Central	Bamyan	Bamyan	Bamyan	Emergence	Not visible	Not seen
		Yakawlang	Yakawlang	Emergence	Not visible	Not seen
		Panjab	Panjab	Emergence	Not visible	Not seen
Eastern	Noristan	Paroon	Paroon	Dormancy		
	Nangarhar	Agam	Agam	Emergence	Not visible	Not seen
		Batikot	Ghaziabad	Emergence	Not visible	Not seen
		Jalalabad	Sheshembagh	Planting	Not visible	Not seen
		Jalalabad	Farm Jadeed	Planting	Not visible	Not seen
	Kunar	Asmar	Asmar	Emergence	Not visible	Not seen
		Asadabad	Asadabad	Emergence	Not visible	Not seen
	Laghman	Mihtarlam	Mihtarlam	Vegetative	Normal	Less amount of rain
Northeastern	Takhar	Bangi	Bangi	Emergence	Not visible	Not seen
		Taluqan	Taluqan	Planting	Not visible	Not seen
	Kunduz	Imam Sahib	Imam Sahib	Planting	Not visible	Not seen
		Qaliazal	Aqtipa	Planting	Not visible	Not seen
		Chardara	Chardara	Emergence	Not visible	Not seen
		Kunduz	Kunduz	Emergence	Not visible	Not seen
	Baghlan	Pulikhomri	Pozaishan	Emergence	Not visible	Not seen
	Badakhshan	Faizabad	Faizabad	Emergence	Not visible	Not seen

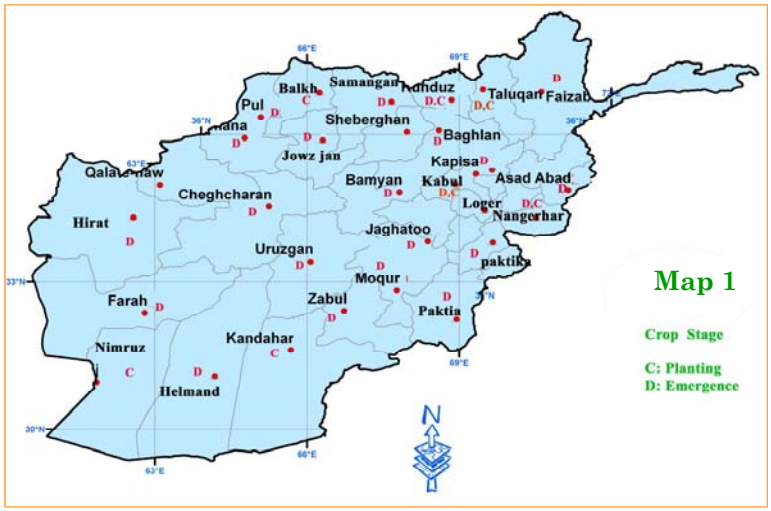
Data Source: MAIL, Agromet Network, AMA, USGS, FAO

Crop Stage, Crop Condition and Adverse Factor

Zone	Province	District	Station	Winter Wheat Stage	Condition	Adverse Factor
South Eastern	Khost	Khost	Khost	Planting	Not visible	Not seen
		Khost	Shimal	Planting	Not visible	Not seen
		Ali Sher	Ali Sher	Planting	Not visible	Not seen
	Paktai	Zormat	Rohani Baba	Emergence	Not visible	Not seen
		Gardiz	Tera	Emergence	Not visible	Not seen
	Paktika	Urgon	Urgon	Planting	Not visible	Not seen
		Sharana	Sharana	Emergence	Not visible	Not seen
		Khairkot	Khairkot	Emergence	Not visible	Not seen
	Ghazni	Muqur	Muqur	Emergence	Not visible	Not seen
		Andar	Bande Sardi	Emergence	Not visible	Not seen
Southern	Nimroz	Zaranj	Zaranj	Planting	Not visible	Not seen
	Kandahar	Kandahar	Kandahar	Planting	Not visible	Not seen
	Zabul	Qalat	Qalat	Emergence	Not visible	Not seen
	Urozgan	Tarinkot	Tarinkot	Emergence	Not visible	Not seen
	Hilmand	Nad Ali	Nad Ali	Emergence	Not visible	Not seen
		Greshk	Greshk	Emergence	Not visible	Not seen
		Nawa	Nawa	Emergence	Not visible	Not seen
		Lashkargah	Bolan	Emergence	Not visible	Not seen
Northern	Balkh	Dihdadi	Dihdadi	Planting	Not visible	Not seen
		Nahrishahi	Nahrishahi	Planting	Not visible	Not seen
	Jawzjan	Sheberghan	Sheberghan	Emergence	Not visible	Not seen
		Darzab	Darzab	Emergence	Not visible	Not seen
	Saripul	Saripul	Saripul	Emergence	Not visible	Not seen
		Sozmaqala	Sozmaqala	Emergence	Not visible	Not seen
	Faryab	Maimana	Maimana	Emergence	Not visible	Not seen
	Samangan	Aibak	Aibak	Emergence	Not visible	Not seen
		Dara Souf Bala	Dara Souf Bala	Emergence	Not visible	Not seen
Western	Badghis	Qalainow	Qalainow	Emergence	Not visible	Not seen
		Muqur	Muqur	Emergence	Not visible	Not seen
	Ghor	Chaghcharan	Chaghcharan	Emergence	Not visible	Not seen
	Hirat	Shindand	Shindand	Emergence	Not visible	Not seen
		Zindajan	Zindajan	Emergence	Not visible	Not seen
		Gwazara	Falahat	Emergence	Not visible	Not seen
		Hirat	Farm Urdokhan	Emergence	Not visible	Not seen
	Farah	Farah	Farah	Emergence	Not visible	Not seen

Data Source: MAIL, Agromet Network, AMA, USGS, FAO

Wheat - Crop Stage - December 2009



Wheat - Crop Condition - December 2009

Not Visible

Wheat - Adverse Factor - December 2009

No Existed

Precipitation

Rainfall was light during the month of December 2009 and the country did not receive enough precipitation during this month.

Few low pressure systems moved into the country, but were not accompanied by adequate moisture to bring sufficient precipitation in different parts of the country, which resulted that the country did not experienced enough rainfall.

In general the rainfall for the month of December 2009 was greater than the same month of last year.

Comparison of rainfall data for the month of December 2009 with the same month in 2008 chart (1), shows significant increase of rainfall during the month of December 2009 compared to the same month of 2008 across the country.

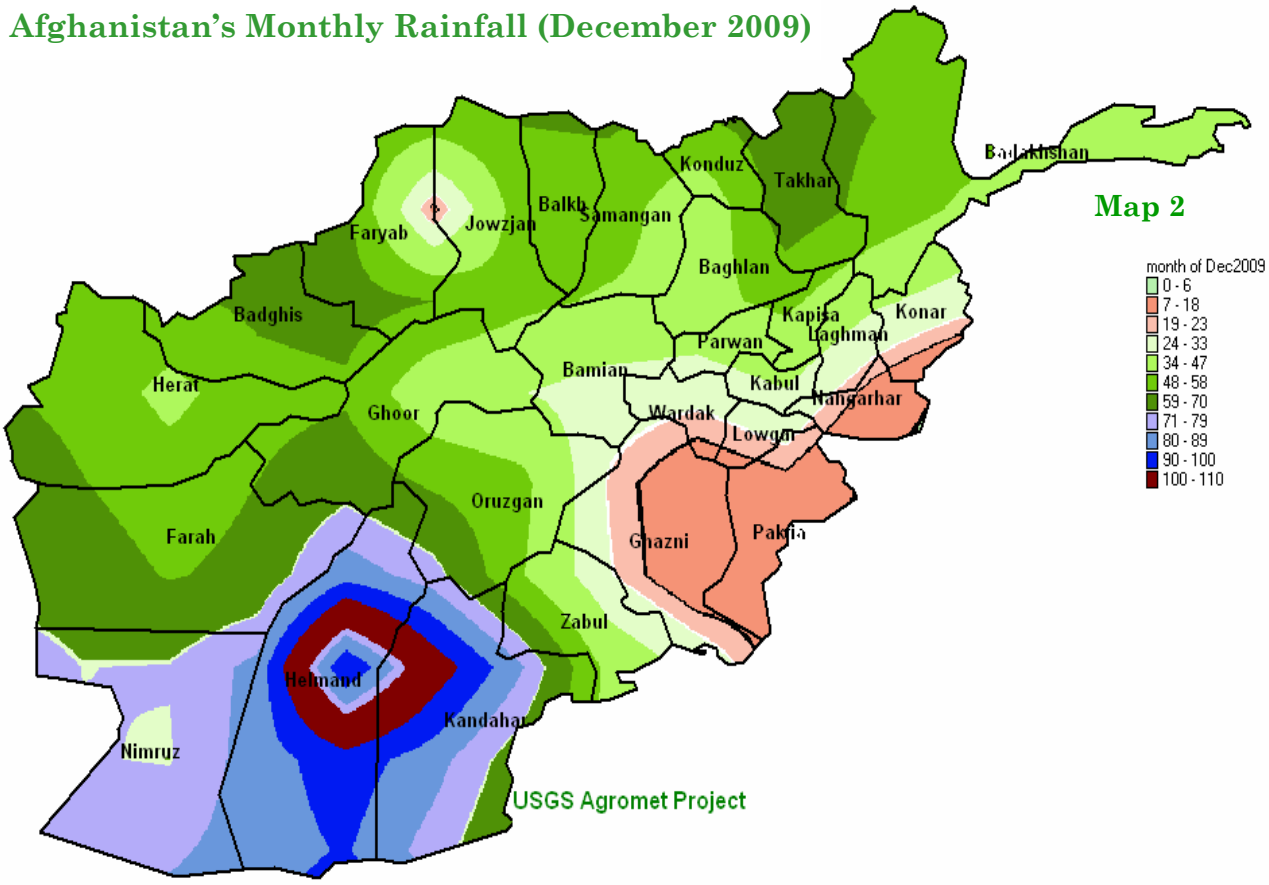
Comparison of rainfall data for the month of December 2009 with the same month of long term average chart (2) shows small increase of rainfall during the month of December 2009 over the same month of long term average across the country.

Distribution of rainfall for the month of December 2009 as usual, was variable in different regions of the country.

As map (2) shows most of the recorded precipitation has occurred in the Southern region during the month of December 2009, but the Eastern region received low amount of rainfall.

The remaining regions of the country experienced moderate rainfall during the month of December 2009.

Afghanistan's Monthly Rainfall (December 2009)



Map 2

Data Source: MAIL, Agromet Network, AMA, USGS, FAO

Rainfall Graphs for the Month of December 2009

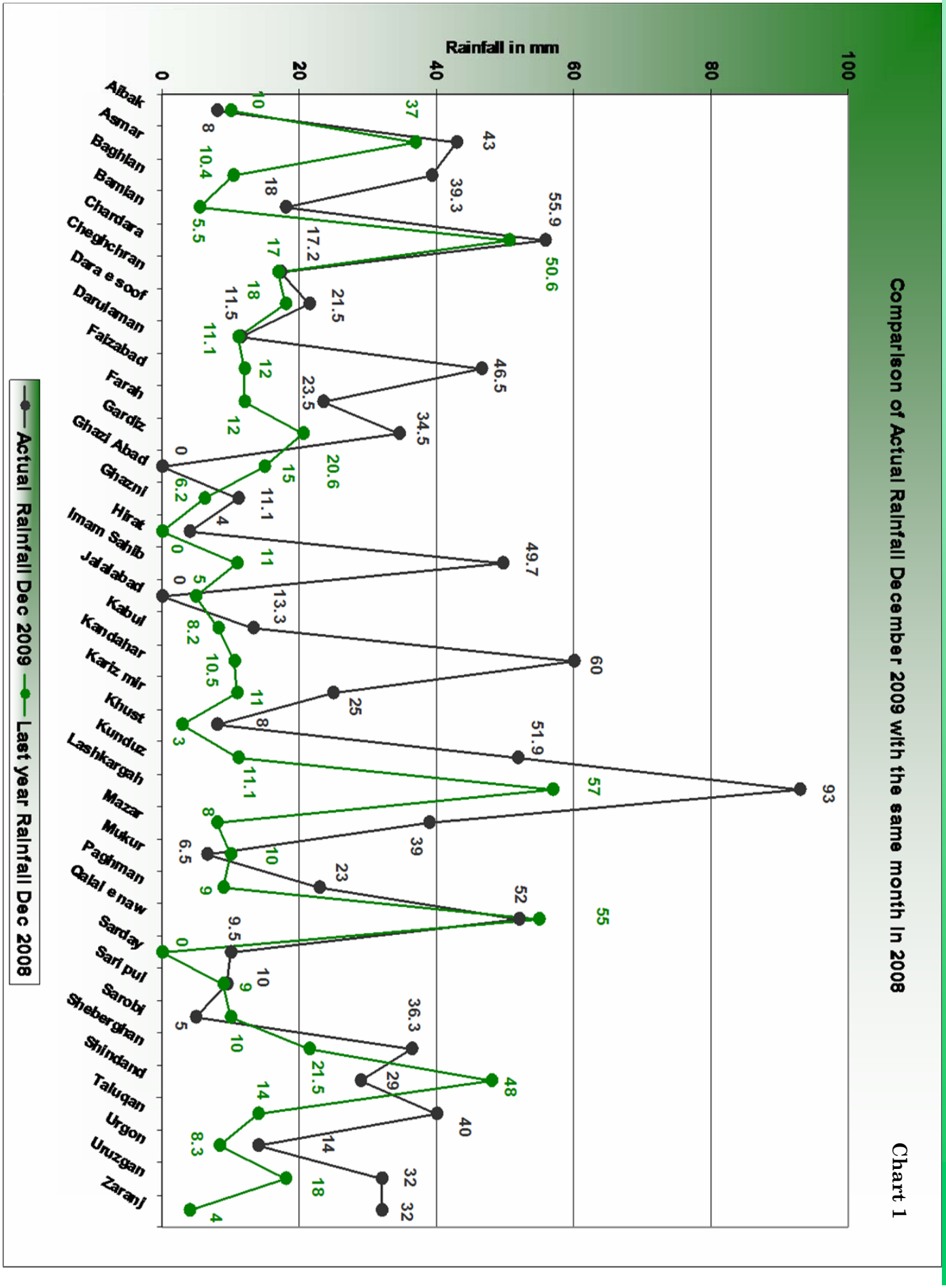
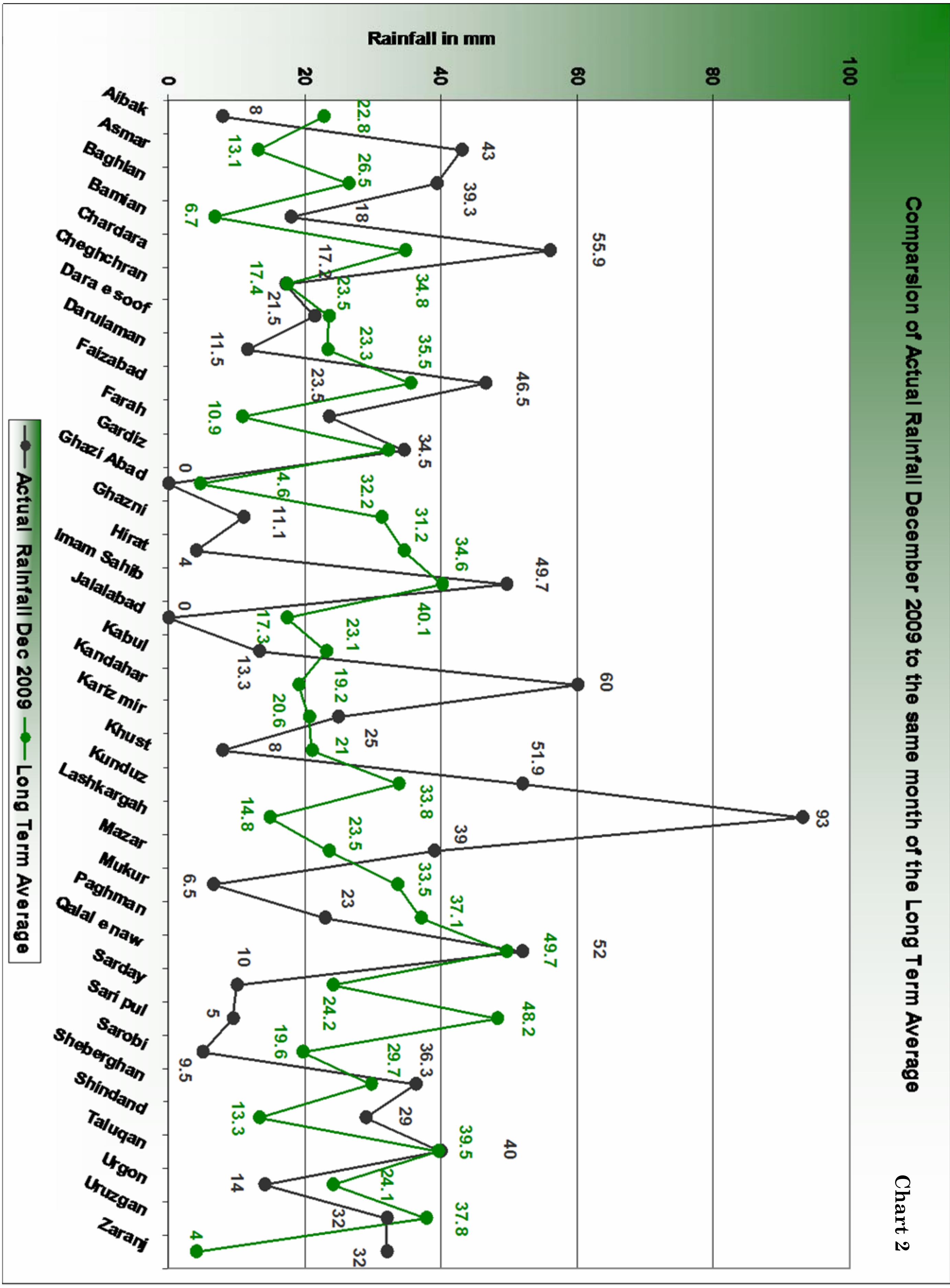


Chart 1

Data Source: MAIL, Agromet Network, AMA, USGS, FAO


Comparison of Actual Rainfall December 2009 to the same month of the Long Term Average
Rainfall in mm
0
20
40
60
80
100
Aibak
Asmar
Baghlan
Bamian
Chardara
Cheghchran
Dara e soof
Darulaman
Faizabad
Farah
Gardiz
Ghazi Abad
Ghazni
Hirat
Imam Sahib
Jalalabad
Kabul
Kandahar
Kariz mir
Khust
Kunduz
Lashkargah
Mazar
Mukur
Paghman
Qalal e naw
Sarday
Sari pul
Sarobi
Sheberghan
Shindand
Taluqan
Urgon
Uruzgan
Zaranj
Actual Rainfall Dec 2009
Long Term Average
Chart 2

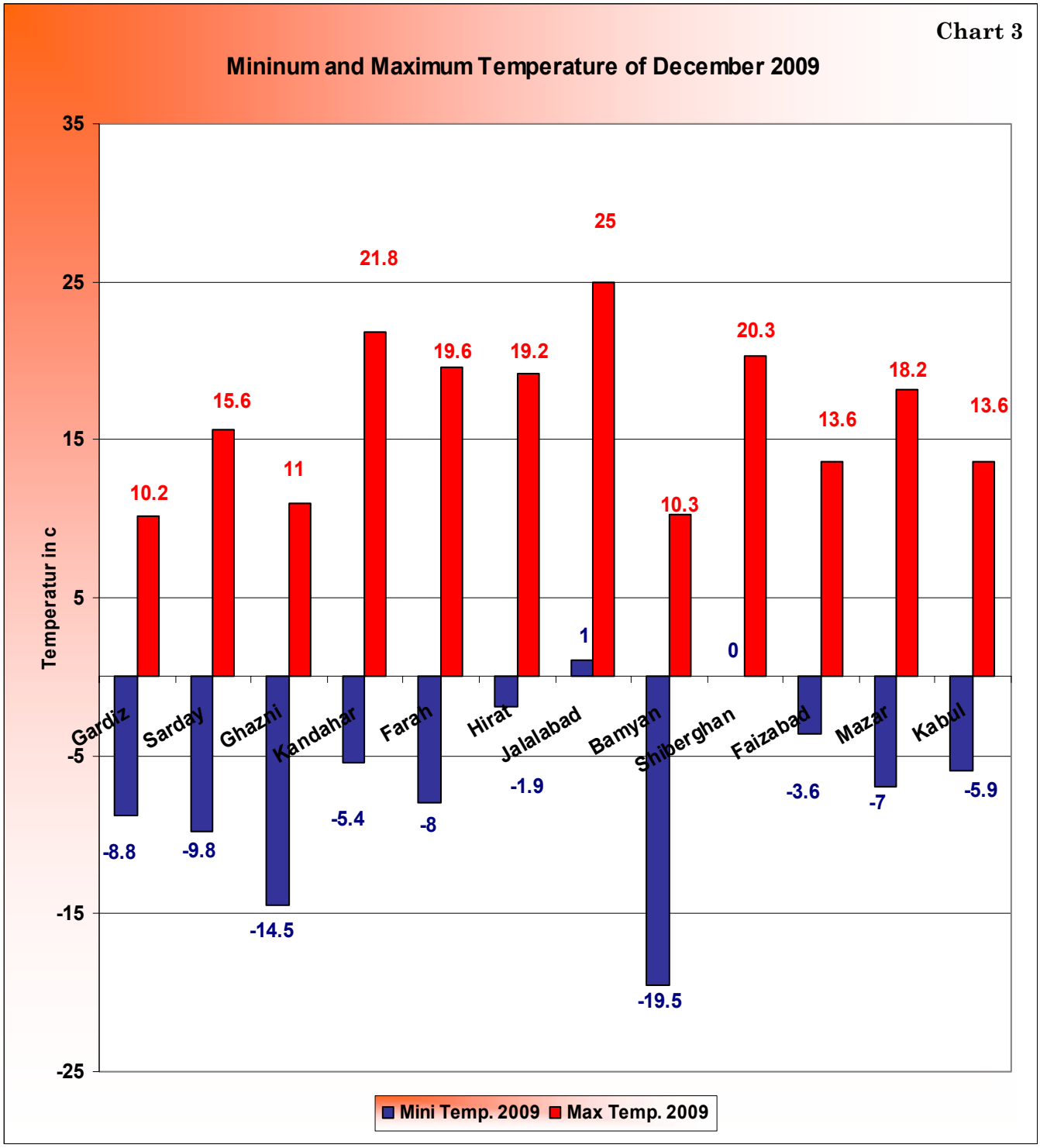
Rainfall for the Month of December 2009

Table 2

Name	Actual Rainfall December 2009	Last year Rainfall December 2008	Long Term Average
Aibak	8	10	22.8
Asmar	43	37	13.1
Baghlan	39.3	10.4	26.5
Bamian	18	5.5	6.7
Chardara	55.9	50.6	34.8
Cheghchran	17.2	17	17.4
Dara e soof	21.5	18	23.5
Darulaman	11.5	11.1	23.3
Faizabad	46.5	12	35.5
Farah	23.5	12	10.9
Gardiz	34.5	20.6	32.2
Ghazi Abad	0	15	4.6
Ghazni	11.1	6.2	31.2
Hirat	4	0	34.6
Imam Sahib	49.7	11	40.1
Jalalabad	1	5	17.3
Kabul	13.3	8.2	23.1
Kandahar	60	10.5	19.2
Kariz mir	25	11	20.6
Khust	8	3	21
Kunduz	51.9	11.1	33.8
Lashkargah	93	57	14.8
Mazar	39	8	23.5
Mukur	6.5	10	33.5
Paghman	23	9	37.1
Qalal e naw	52	55	49.7
Sarday	10	0	24.2
Sari pul	9.5	9	48.2
Sarobi	5	10	19.6
Sheberghan	36.3	21.5	29.7
Shindand	29	48	13.3
Taluqan	40	14	39.5
Urgon	14	8.3	24.1
Uruzgan	32	18	37.8
Zaranj	32	4	4

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Chart 3

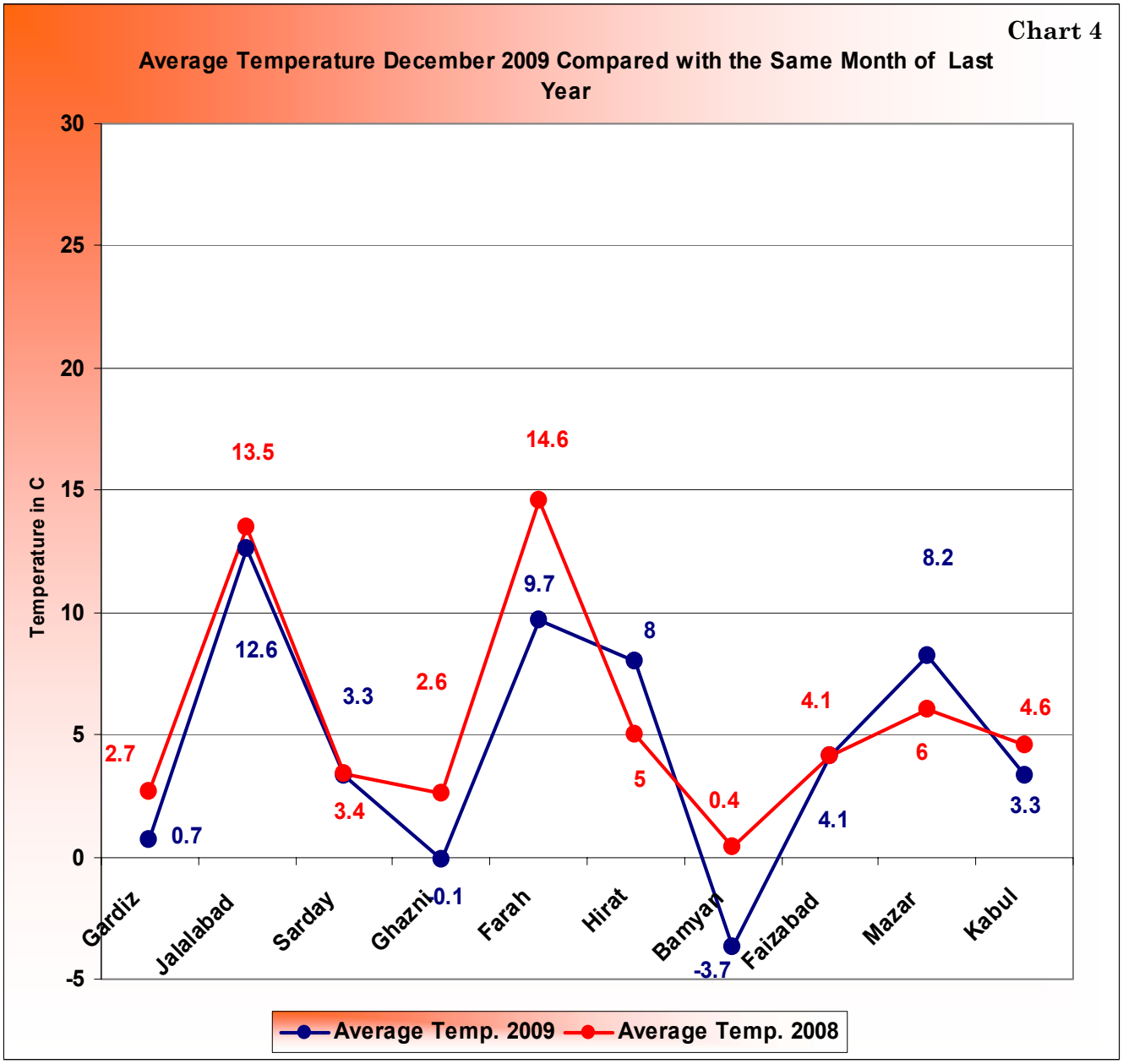


Bamyan with –19.5 C° experienced extreme cold weather during the month of December 2009 .

Chart(3) shows maximum and minimum temperature for the month of December 2009 all around the country, as chart (3) shows Bamyan with –19.5 C° experienced extreme cold weather during the month of December 2009 and Jalalabad with 25 ° C was the warmest spot of the country.

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Chart 4



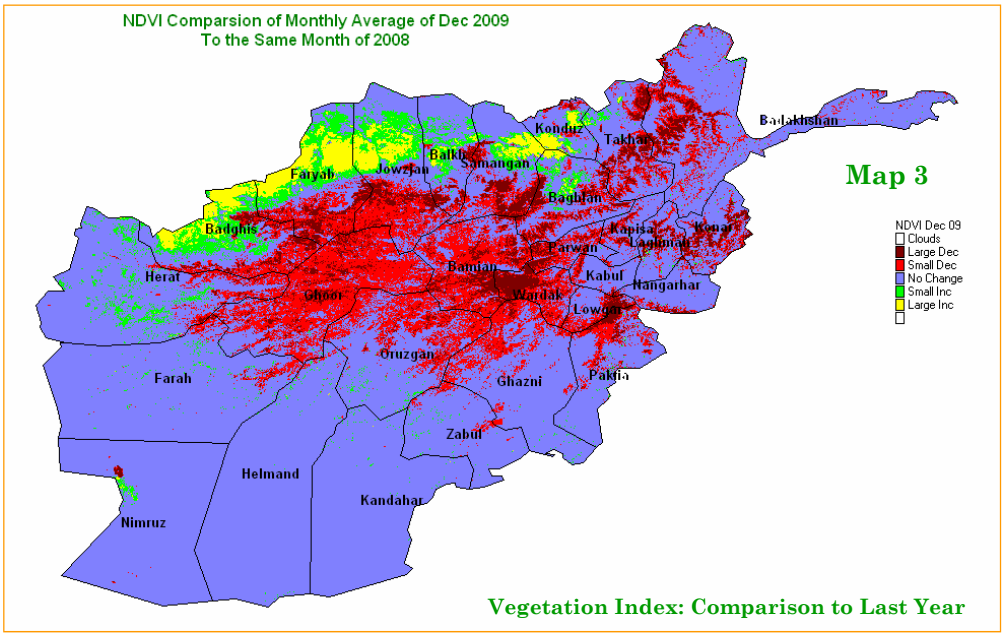
During the month of December 2009 temperature was lower compared to the same month of last year all around the country.

Temperature remained at the into freezing in most parts of the country, particularly in the high elevations. Minimum temperature dropped – 19.5 C° in Central Highlands. Below freezing temperature during the month of December 2009 allowed the snow to build up across the high elevations of the country.

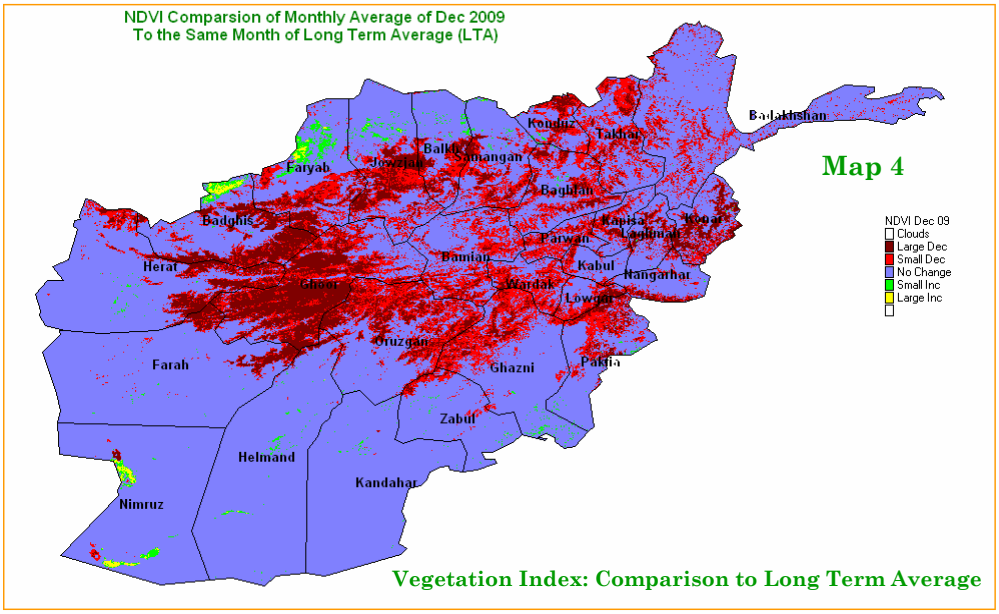
Temperature for the month of December 2009 had not significant change over the same month of last year, but in general temperature was lower during December 2009 than the same month of last year.

Comparison of monthly average of temperature for the month of December 2009 with the same month in 2008 chart (4) shows a decrease of temperature during the month of December 2009 over the same month of last year in most parts of the country, except Herat and Mazar where temperature was higher in these locations.

Data Source: MAIL, Agromet Network, AMA, USGS, FAO



Vegetation Index: Comparison to Last Year



Vegetation Index: Comparison to Long Term Average

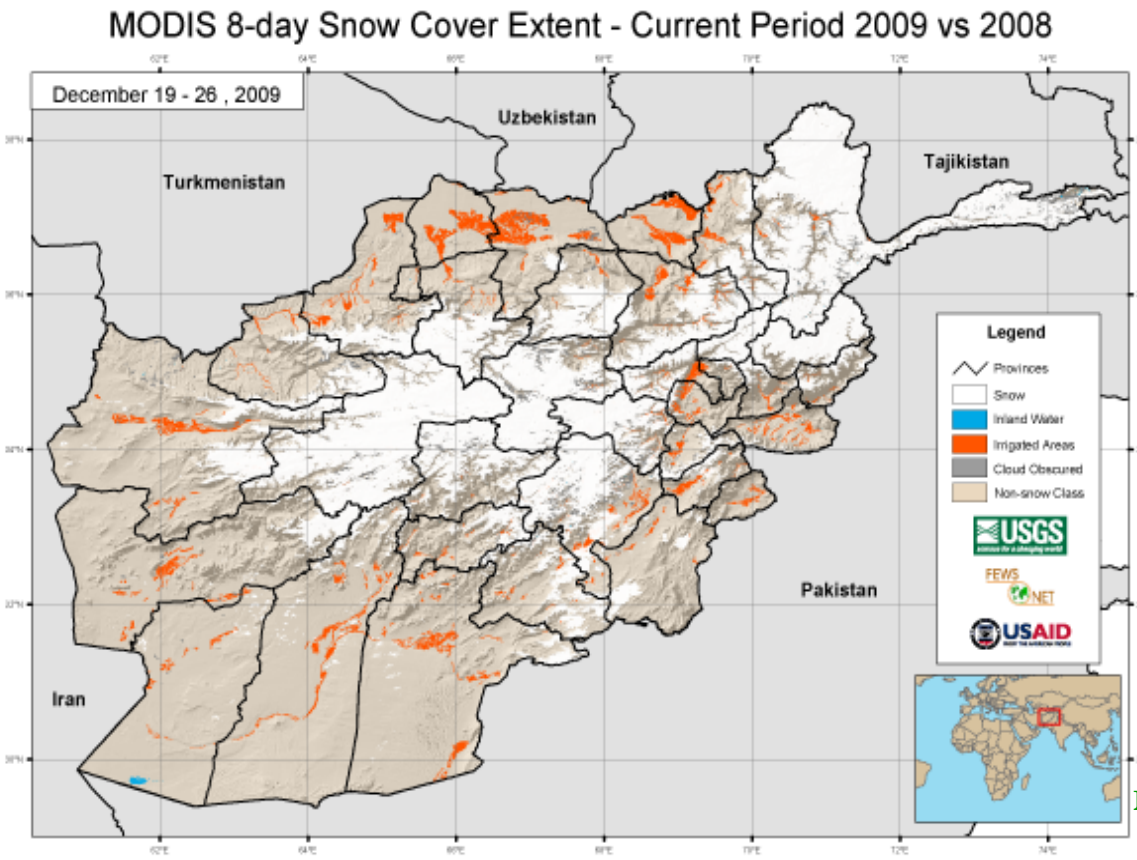
NDVI: December 2009

Comparison of monthly average of NDVI for the month of December 2009 with the same month in 2008 map (3) shows large increase of NDVI in the Northern and Northwestern plain areas during the month of December 2009 compared toe the same month of last year, and also shows small decrease of NDVI in the Central Highlands, Capital region, some parts in the Northeastern, some parts in the Southeastern region and the Eastern parts of the Western region during December 2009.

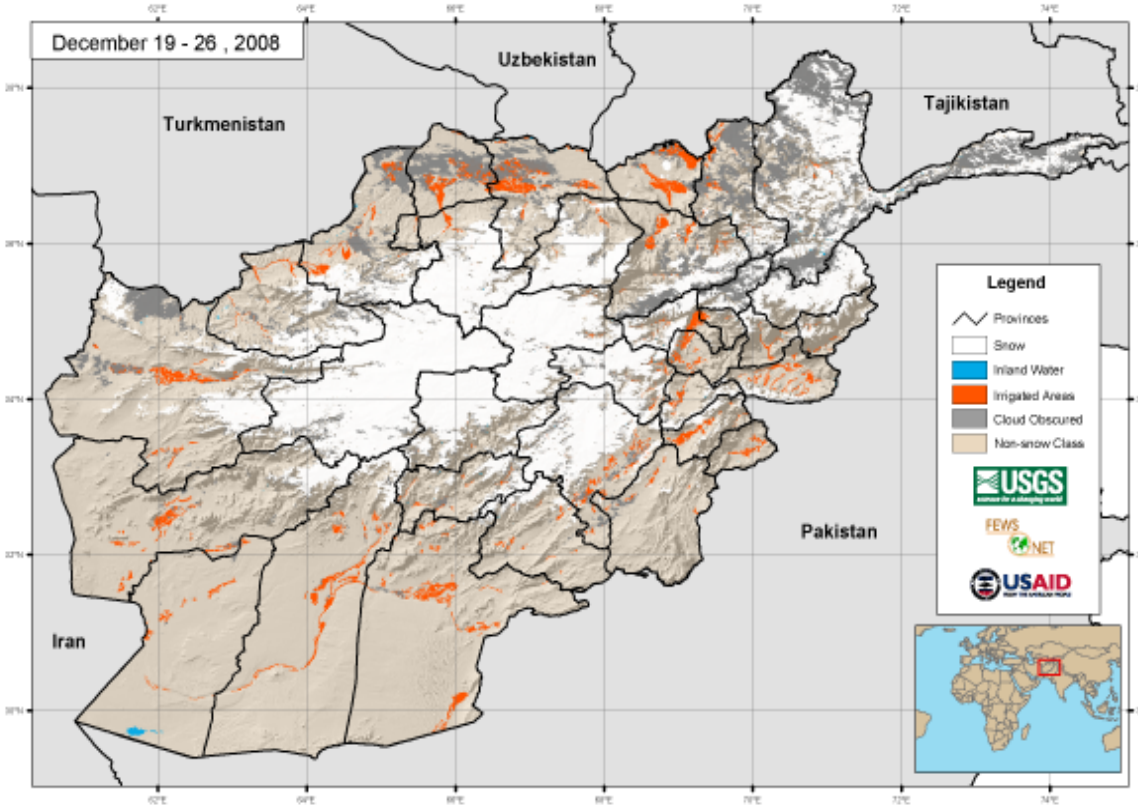
There is no change in NDVI value during the month of December 2009 compared to the same month in 2008. Comparison of monthly average of NDVI for the month of December 2009 with the same month long term average map (4) shows large decrease of NDVI in the Eastern parts of the Western region during the month of December 2009 compared to the same month of long term average, and small decrease occurred in NDVI value in the as separated in the Central Highlands, some parts in the Northern mountainous area, some parts the capital region, Eastern and Southeastern regions during the month of December 2009 over the same month of long term average.

There is no change in NDVI value in the remaining regions of the country during December 2009 compared to the same month of long term average.

Data Source: MAIL,Agromet Network, AMA, USGS,FAO



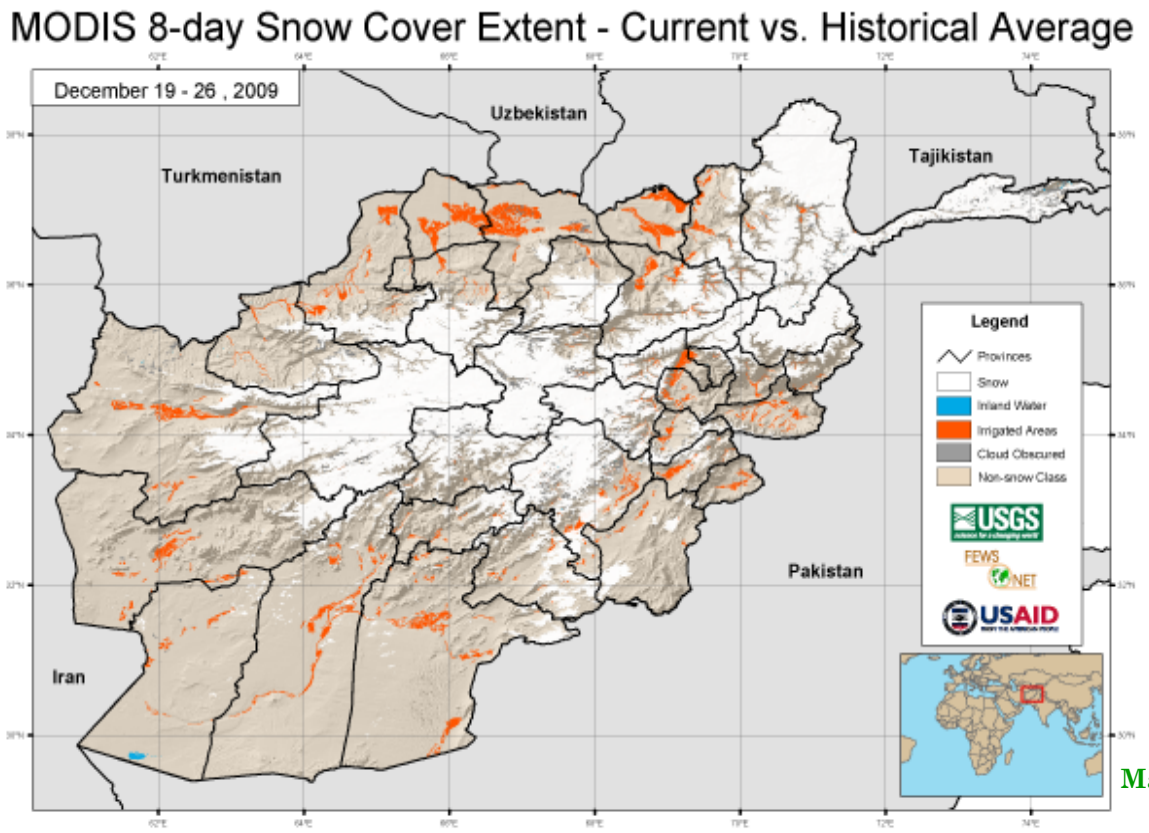
Map 5



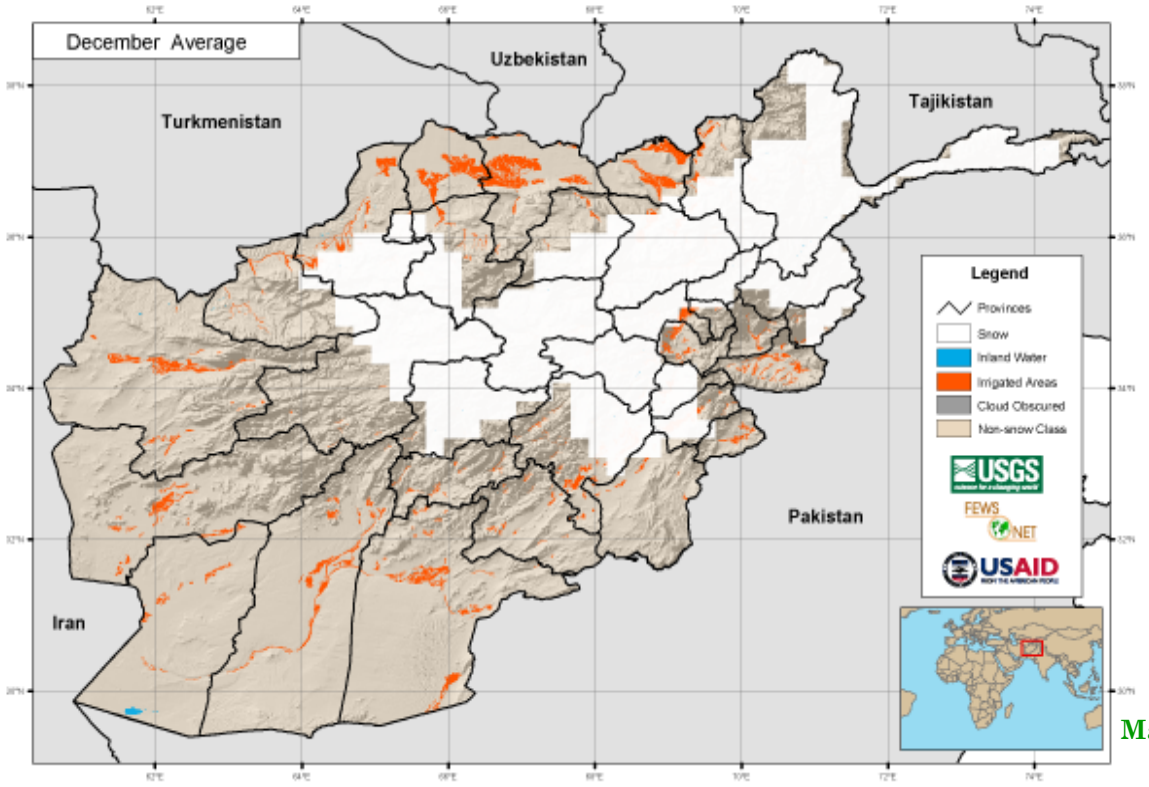
Map 6

Comparison of snow extent for the period of December (19 – 26) 2009 with the same period in 2008 map (7) shows no significant change occurred in snow extent during above mentioned period of December 2009 compared to the same period of last year.

Data Source: MAIL, Agromet Network, AMA, USGS, FAO



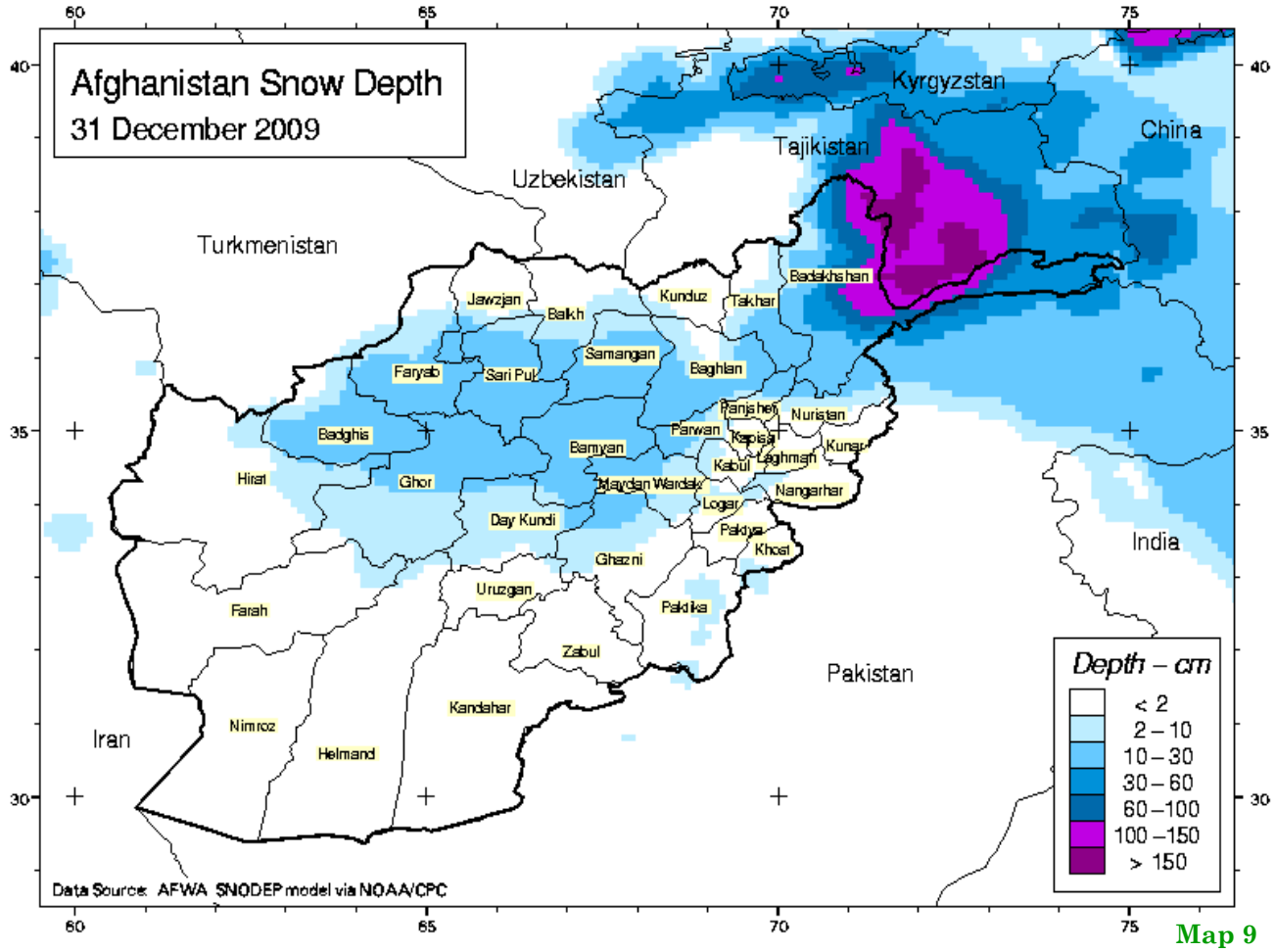
Map 7



Map 8

Comparison of snow extent for the month of December 2009 with the same month of long term average map (8), shows no significant change occurred in snow extent during the month of December 2009 compared to the same month of long term average .

Data Source: MAIL,Agromet Network, AMA, USGS,FAO



Map 9

Map (9) shows snow depth at the end of December in snow coverage areas, which snow depth has been recorded 100 up to 150 cm in the extreme portion of the Northeastern region and 10 to 30 cm for the Central Highlands and neighboring areas.

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